Attorney Docket No: 27053-17244 US Client Ref: JA56149P.USP

USSN: 10/549,384

## AMENDMENTS TO THE CLAIMS

1-111. (Cancelled)

112. (Currently Amended) A composition for promoting muscle carnitine accumulation in

human skeletal muscle, the composition comprising L-carnitine or an analogue thereof

and an agent to increase blood plasma/serum insulin concentration, and wherein the

amount of L-carnitine or analogue thereof is 0.25g to 3g and the amount of the agent is

30g to 450g by weight of said agent is at least ten times the amount by weight of said L

carnitine or analogue thereof.

113. (Previously Presented) A composition according to claim 112 wherein the agent is

operable to increase sodium dependent carnitine uptake into skeletal muscle.

114. (Previously Presented) A composition according to claim 112 wherein the agent is

operable to increase insulin activity in skeletal muscle.

115. (Previously Presented) A composition according to claim 112 wherein the agent

comprises a carbohydrate and/or an amino acid and/or a protein.

116. (Previously Presented) A composition according to claim 115 wherein the agent is a

carbohydrate.

117. (Previously Presented) A composition according to claim 115 wherein the agent

comprises an amino acid.

118. (Previously Presented) A composition according to claim 116 wherein the carbohydrate is

a sugar.

Client Ref: JA56149P.USP

USSN: 10/549,384

119. (Previously Presented) A composition according to claim 116 wherein the carbohydrate comprises glucose, sucrose, and/or fructose.

- 120. (Previously Presented) A composition according to claim 112 wherein the amount by weight of the agent is between 10 and 150 times the amount by weight of said L-carnitine.
- 121. (Previously Presented) A composition according to claim 112 wherein the amount by weight of the agent is between 10 and 95 times the amount by weight of said L-carnitine.
- 122. (Previously Presented) A composition according to claim 112 wherein the amount by weight of the agent is between 10 and 40 times the amount by weight of said L-carnitine.
- 123. (Currently Amended) A composition according to claim 112 comprising 0.25g to 3g L-carnitine and between 30g and 120g 2.5g and 450g of the agent.
- 124. (Currently Amended) A composition according to claim 112 comprising 0.25g to 3g L-carnitine and between 2.5g 230g and 285g of the agent.
- 125. (Cancelled)
- 126. (Previously Presented) A composition according to claim 112 in the form of a solution.
- 127. (Previously Presented) A composition according to claim 112 in the form of an aqueous solution.
- 128. (Currently Amended) A composition for promoting muscle carnitine accumulation in human skeletal muscle, the composition comprising 0.25g to 3g of L-carnitine or an

Client Ref: JA56149P.USP

USSN: 10/549,384

analogue thereof and between 30g and 120g 2.5g and 450g of an agent to increase blood

plasma/serum insulin concentration.

129. (Previously Presented) A composition according to claim 128 wherein the agent is

operable to increase sodium dependent carnitine uptake into skeletal muscle.

130. (Previously Presented) A composition according to claim 128 wherein the agent is

operable to increase insulin activity in skelctal muscle.

131. (Previously Presented) A composition according to claim 128 wherein the agent

comprises a carbohydrate and/or an amino acid and/or a protein.

132. (Previously Presented) A composition according to claim 131 wherein the agent is a

carbohydrate.

133. (Previously Presented) A composition according to claim 131 wherein the agent

comprises an amino acid.

134. (Previously Presented) A composition according to claim 132 wherein the carbohydrate is

a sugar.

135. (Previously Presented) A composition according to claim 132 wherein the carbohydrate

comprises glucose, sucrose, and/or fructose.

136. (Previously Presented) A composition according to claim 128 wherein the amount by

weight of the agent is between 10 and 150 times the amount by weight of said L-

carnitine.

27053/17244/SF/5329005.3

4

Client Ref. JA56149P.USP

USSN: 10/549,384

137. (Previously Presented) A composition according to claim 128 wherein the amount by

weight of the agent is between 10 and 95 times the amount by weight of said L-carnitine.

138. (Previously Presented) A composition according to claim 128 wherein the amount by

weight of the agent is between 10 and 40 times the amount by weight of said L-carnitine.

139-141. (Cancelled)

142. (Previously Presented) A composition according to claim 128 in the form of a solution.

143. (Previously Presented) A composition according to claim 128 in the form of an aqueous

solution.

144. (Currently Amended) A composition for increasing the carnitine content of human

skeletal muscle, the composition comprising L-carnitine or an analogue thereof and an

agent to increase blood plasma/serum insulin concentration, wherein the L-carnitine or

analogue thereof is provided in sufficient quantity to increase blood/plasma carnitine

concentration and wherein the agent is provided in sufficient quantity to increase insulin

activity in the tissue by increasing the amount of insulin in the blood/plasma agent is-

present in an amount sufficient to increase blood plasma/serum insulin concentration

above 50 mU/l.

145. (Previously Presented) A composition according to claim 144 wherein the agent is

operable to increase sodium dependent carnitine uptake into skeletal musele.

146. (Previously Presented) A composition according to claim 144 wherein the agent is

operable to increase insulin activity in skeletal muscle.

Client Ref: JA56149P.USP

USSN: 10/549,384

147. (Previously Presented) A composition according to claim 144 wherein the agent

comprises a carbohydrate and/or an amino acid and/or a protein.

148. (Previously Presented) A composition according to claim 147 wherein the agent is a

carbohydrate.

149. (Previously Presented) A composition according to claim 147 wherein the agent

comprises an amino acid.

150. (Previously Presented) A composition according to claim 148 wherein the carbohydrate is

a sugar.

151. (Previously Presented) A composition according to claim 148 wherein the carbohydrate

comprises glucose, sucrose, and/or fructose.

152. (Previously Presented) A composition according to claim 144 wherein the amount by

weight of the agent is between 10 and 150 times the amount by weight of said L-

carnitine.

153. (Previously Presented) A composition according to claim 144 wherein the amount by

weight of the agent is between 10 and 95 times the amount by weight of said L-carnitine.

154. (Previously Presented) A composition according to claim 144 wherein the amount by

weight of the agent is between 10 and 40 times the amount by weight of said L-carnitine.

155. (Currently Amended) A composition according to claim 144 comprising 0.25g to 3g L-

carnitine and between 30g and 450g 2.5g and 450g of the agent.

27053/17244/SF/5329005.3

6

Client Ref. JA56149P.USP

USSN: 10/549,384

156. (Currently Amended) A composition according to claim 144 comprising 0.25g to 3g L-

carnitine and between 30g and 120g 2.5g and 285g of the agent.

157. (Currently Amended) A composition according to claim 144 comprising 0.25g to 3g L-

carnitine and between 230g and 285g 2.5g and 120g of the agent.

158. (Previously Presented) A composition according to claim 144 in the form of a solution.

159. (Previously Presented) A composition according to claim 144 in the form of an aqueous

solution.

160. (Previously Presented) A method of increasing carnitine retention in human and/or animal

skeletal muscle, the method comprising administering a composition according to claim

112 to a human and/or animal body in need thereof.

161. (Previously Presented) A prepared human dose comprising a composition according to

claim 112.

162. (Previously Presented) A method of treatment of carnitine deficiency in the skeletal

muscle of a human subject in need thereof, comprising administering to the subject a

composition according to claim 112.

163. (New) The composition of claim 112, wherein L-carnitine or an analogue thereof is L-

carnitine.

164. (New) The composition of claim 128, wherein L-carnitine or an analogue thereof is L-

carnitine.

27053/17244/SF/5329005.3

7

Client Ref: JA56149P.USP

USSN: 10/549,384

165. (New) The composition of claim 144, wherein L-carnitine or an analogue thereof is L-carnitine.